

**DEPARTMENT OF TRANSPORTATION**

DES-OE MS #43  
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Sacramento, CA 95816



**\*\* WARNING \*\* WARNING \*\* WARNING \*\* WARNING \*\***  
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September 22, 2003

04-SF-80-12.6/13.2  
04-0120R4  
ACBRIM-080-1(097)N

Addendum No. 10

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in IN THE CITY AND COUNTY OF SAN FRANCISCO FROM YERBA BUENA TUNNEL TO 0.6 KM EAST OF THE YERBA BUENA TUNNEL.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on October 15, 2003.

This addendum is being issued to revise the Project Plans, the Notice to Contractors and Special Provisions, and the Proposal and Contract.

Project Plan Sheets 8, 47, 48, 80, 94, 95, 96, 97, 103, 106, 135F, 136D, 149, 150 and 151 are revised. Half-sized copies of the revised sheets are attached for substitution for the like-numbered sheets.

Project Plan Sheet 52B is added. A half-sized copy of the added sheet is attached for addition to the project plans.

On Project Plan Sheet No. 135E the callout "W250x80" is revised to read "W250x101".

In the Special Provisions, Section 2-1.06, "BIDDER COMPENSATION," the first paragraph is revised as follows:

"The Department recognizes the cost required to prepare bids for a project of this magnitude. To encourage competitive bids, within 90 days of award of the contract, the second and third bidders shall each receive \$300,000 to defray a portion of the costs of providing a responsive bid."

In the Special Provisions, Section 4 "BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES," the sixth paragraph is revised as follows:

"The Contractor shall vacate the Area CPR and FPR, to make available to Contract 04-0120P4 no later than October 14, 2005."

In the Special Provisions, Section 5-1.14, "CONTRACTOR DESIGN," subsection "Contractor's Engineer," the following paragraph is added after the last paragraph.

"When meetings are to be held between the Contractor's Engineer and the Department's representatives to address "Contractor Design" matters, the meeting shall be at one of the following locations:

- 1- SFOBB Construction Offices, 333 Burma Road, Oakland, CA 94607
- 2- Department Of Transportation, 1801 30<sup>th</sup> Street, Sacramento, CA 95816"

04-SF-80-12.6/13.2  
04-0120R4  
ACBRIM-080-1(097)N

In the Special Provisions, Section 5-1.14, "CONTRACTOR DESIGN," subsection "DESIGN," the following sentences are added to the eighth paragraph:

"The expansion joint locations shown on the plans are approximate and are intended to delineate the TBS superstructure segments. The Contractor's design may include additional expansion joints within the viaduct and east tie-in segments provided that the resulting TBS design conforms with the requirements of the design criteria shown on the plans, and the requirements under "Relations with the U.S. Coast Guard" and "Sound Control Requirements," of these special provisions."

In the Special Provisions, Section 5-1.14, "CONTRACTOR DESIGN," subsection "DESIGN," the following paragraph is added after the ninth paragraph:

"The Contractor's planned locations for permanent TBS foundations shall not interfere with the planned future foundation construction shown on the plans. The Contractor's designs for permanent TBS foundations shall accommodate future removal to 0.3 meter below existing ground or 1 meter below the finished grade, whichever is lower."

In the Special Provisions, Section 5-1.14, "CONTRACTOR DESIGN," subsection "DESIGN," subsection "Geotechnical Investigation," is revised as attached.

In the Special Provisions, Section 5-1.18, "AREAS FOR CONTRACTOR USE," in the third paragraph Items "4" and "5" the date "September 15, 2005" is revised to read "October 14, 2005."

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the third paragraph is revised as follows:

"The Contractor shall complete all work within the Area CPR and Area FPR and shall vacate it to make available to Contract 04-0120P4 no later than October 14, 2005."

In the Special Provisions, Section 10-1.135, "TEMPORARY SHUTTLE VAN SERVICE," is added as attached.

In the Special Provisions, Section 10-1.15, "TEMPORARY BYPASS STRUCTURE," is revised as attached.

In the Special Provisions, Section 10-1.16, "TEMPORARY SUPPORTS," subsection "REMOVING TEMPORARY SUPPORTS," the following paragraph is added after the first paragraph:

"Except for temporary supports for the Move-In and Move-Out operations, and where otherwise shown on the plans, all Temporary Structures designated as "Important Construction" in the design criteria shown on the plans, shall remain in place at the completion of TBS construction. All other temporary supports, unless otherwise designated."

In the Special Provisions, Section 10-1.29, "MAINTAINING TRAFFIC," the sixteenth paragraph is revised as follows:

"Full compensation for providing and maintaining the above access shall be considered as included in the contract price paid for various items of work involved and no additional compensation will be allowed therefor."

04-SF-80-12.6/13.2  
04-0120R4  
ACBRIM-080-1(097)N

In the Special Provisions, Section 10-1.29, "MAINTAINING TRAFFIC," the following paragraph, added after the fourteenth paragraph in Addendum No. 9, dated September 4, 2003, is deleted.

"After completion of the 04-0120R4 Contract, the Contractor shall provide a minimum 6.0 m wide construction access road along Southgate Road with 3.7 m minimum vertical clearance under TBS as directed by the Engineer."

In the Special Provisions, Section 10-1.38, "EXISTING HIGHWAY FACILITIES," the third and fourth paragraphs are revised as follows:

"Materials to be salvaged include:

- 1 North Side and 1 South Side Truss Web Scaffold
- Mobile Ladders
- 2 Upper Deck Travelers (with all motors, trolleys, nets, and appurtenances.)
- 1 Lower Deck Traveler (with all motors, trolleys, nets, and appurtenances.)

The Contractor shall notify the Engineer 48 hours prior to initiating salvage operations and hauling of salvaged material to the East Bay Maintenance Yard."

In the Special Provisions, Section 10-1.38, "EXISTING HIGHWAY FACILITIES," the fifth paragraph is deleted.

In the Special Provisions, Section 10-1.38, "EXISTING HIGHWAY FACILITIES," subsection, "RECONSTRUCT SOUTHGATE ROAD," is added as attached.

In the Special Provisions, Section 10-1.295, "BARRIER TRUCK," is added as attached.

In the Special Provisions, Section 10-1.521, "OPEN GRADED ASPHALT CONCRETE" is deleted.

In the Special Provisions, Section 10-1.522, "EPOXY ASPHALT CONCRETE SURFACE" is deleted.

In the Proposal and Contract, the Engineer's Estimate Items 63 and 65 are revised, Items 93 and 94 are added and Item 92 is deleted as attached.

To Proposal and Contract book holders:

Replace pages 6 and 7 of the Engineer's Estimate in the Proposal with the attached revised pages 6 and 7 of the Engineer's Estimate. The revised Engineer's Estimate is to be used in the bid.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the proposal.

Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

Addendum No. 10  
Page 4  
September 22, 2003

04-SF-80-12.6/13.2  
04-0120R4  
ACBRIM-080-1(097)N

This office is sending this addendum by UPS overnight mail to Proposal and Contract book holders to ensure that each receives it. A copy of this addendum and the modified wage rates are available for the contractor's use on the Internet Site:

**[http://www.dot.ca.gov/hq/esc/oe/weekly\\_ads/addendum\\_page.html](http://www.dot.ca.gov/hq/esc/oe/weekly_ads/addendum_page.html)**

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY:

REBECCA D. HARNAGEL, Chief  
Office of Plans, Specifications & Estimates  
Office Engineer

Attachments

### **Geotechnical Investigation**

The foundation design shall conform to the design criteria as shown on the plans, and as supplemented by the following foundation information provided in the information handout:

1. "Geotechnical Foundation Report for YBI Approach and Self-Anchored Suspension Bridge," June 2002 by Fugro-Earth Mechanics, Joint Venture
2. "Final Yerba Buena Island Geotechnical Site Characterization Report, San Francisco Oakland Bay Bridge East Span Seismic Safety Project," December 2001 by Fugro-Earth Mechanics, Joint Venture
3. "Additional Information for Pile Foundations Yerba Buena Island Temporary Bypass Structure (TBS) Design-Build SFOBB East Span Seismic Safety Project," July 18, 2003, by Fugro-Earth Mechanics, Joint Venture

The available foundation information is not considered to be sufficient to facilitate the design of all required TBS foundations. At the Contractor's expense, the Contractor shall conduct additional foundation investigations to facilitate the design of all TBS foundations in areas where the foundation information is insufficient. Such investigations shall conform to the provisions in Section 49-1.03, "Determination of Length," of the Standard Specifications.

The Contractor shall prepare and submit a Foundation Report for all proposed TBS foundation designs, regardless of whether they are based on the information contained in the information handout or result from investigations conducted by the Contractor. The Foundation Report shall be prepared in conformance with the requirements in the Information and Procedures Guide of the Office of Special Funded Projects of the Department and shall be signed by an engineer who is registered as a Geotechnical Engineer in the State of California. This same engineer shall certify in writing that the TBS foundations are constructed in conformance with the Foundation Report. For foundation designs based on the information contained in the information handout, the Foundation Report shall be a certification by the Contractor's registered Geotechnical Engineer, that the information is adequate for the design, and no further investigation is required.

Due to the steep gradients of the restricted slope area designated on the plans, only geological site reconnaissance has been conducted. The available foundation information provides some information on the soil and rock conditions and groundwater levels interpolated from areas surrounding the slopes. Geotechnical investigation information adequate for foundation design on the restricted slope area is not available. If the Contractor decides to place any on the restricted slope area, the Contractor's Geotechnical Engineer shall conduct geotechnical site investigations to verify local soil and groundwater conditions in this area, and to obtain necessary input parameters for design for the foundations and evaluation of slope stability, and prepare an accompanying Foundation Report. The geotechnical site investigations and Foundation Report shall conform to these special provisions.

If the Contractor decides to place permanent TBS foundations on the restricted slope, the Contractor's Geotechnical Engineer shall either develop new response spectra for the structures on the slope, or validate that the Design Evaluation Earthquake (DEE) defined in the design criteria shown on the plans, is applicable for structures on the slope. Any new response spectra developed for structures on the slope shall have the same return period as the DEE. Documentation prepared by the Contractor's Geotechnical Engineer in developing either the new response spectra or validation of the use of the DEE, shall be submitted with the Foundation Report.

The Contractor's Geotechnical Engineer shall develop foundation designs and mitigation measures against potential slope failure initiated by external loading from these foundations and construction activities on the slope. The Contractor shall submit to the Engineer for approval a design report addressing slope stability. This report shall include, but not be limited to, the method of analysis with narrative, input parameters used, design calculations, results, mitigation measures against potential slope failure and conclusions. For the design procedures and requirements for the slope stability evaluation, consult the following reference:

1. Caltrans 2002, Guideline for Foundation Investigations and Reports (Caltrans 2000 Guidelines) - (Version 1.2, June 2002)  
(<http://www.dot.ca.gov/hq/esc/geotech/request.htm#fg>)

The Contractor's Geotechnical Engineer shall prepare and submit a report, including relevant calculations, showing that slope stability has been checked against a static factor of safety of 1.3 for all stages of construction. Such stages of construction shall include foundation investigations, construction of foundations, and removal of foundations. Two copies of the report shall be submitted to the Engineer.

The use of spread footings on the slope will require prior stabilization of the upper 2 meters of existing surface soils. Spread footings shall have a horizontal setback of 1.2 meters from the slope face. Any slope modification requires prior slope preparation and installation of a protective catchment system to maintain full-time access to the existing USCG facilities. The protective catchment system shall be submitted to the Engineer for approval. All earthwork shall conform with the requirements in Section 19, "Earthwork," of the Standard Specifications.

The slope shall be monitored during construction of the TBS to check for any slope displacement within 200 meters of either side of the TBS. The Contractor shall perform an initial topographic survey as part of the displacement monitoring system to record the location of the existing slope prior to the commencement of any work. Two copies of the survey shall be signed by an engineer, who is registered as a Civil Engineer in the State of California, and submitted to the Engineer.

Vandal-resistant displacement monitoring equipment shall be provided and maintained. Vertical and horizontal displacements of the slope shall be monitored continuously and shall be accurately measured and recorded at least weekly during construction of the TBS. The records of vertical and horizontal displacement shall be signed by an engineer who is registered as a Civil Engineer in the State of California.

After completion of construction of the TBS, all temporary foundations constructed to facilitate construction of the TBS on the restricted slope area, shall be removed as follows:

1. At the locations of future permanent foundations, where shown on the plans, foundations shall be completely removed.
2. At all other locations, foundations shall be removed 0.3 meter below existing ground or 1 meter below the finished grade, whichever is lower.

After removal of any temporary foundations placed on the slope to facilitate construction of the TBS, all modified slopes, within 200 meters to either side of the TBS, including excavations required to remove foundation components, shall be restored to a condition that is stable under both static and future earthquake loading. The finished slope shall be designed for a static factor of safety of 1.3 and a pseudo-static factor safety of 1.1, as specified in Caltrans 2002 Guidelines. For the pseudo-static analysis, a seismic coefficient equal to 1/3 of the peak ground acceleration shown on the design criteria may be used, but the peak ground acceleration shall not be greater than 0.2g, as specified in Caltrans 2002 Guidelines. The Contractor's Geotechnical Engineer shall prepare and submit a report, including relevant calculations, showing that the finished slope meets these requirements. Two copies of the report shall be submitted to the Engineer.

The final slope shall include protective measures for surficial ground stability and erosion control. Such measures shall conform to the various Erosion Control requirements specified elsewhere in these special provisions, and shall be submitted to the Engineer for approval.

#### **10-1.135 TEMPORARY SHUTTLE VAN SERVICE**

The Contractor shall provide a temporary shuttle van service for transporting general public and passengers on Yerba Buena Island (YBI) to reduce number of personal vehicles and to facilitate the construction of the bridge, as directed by the Engineer. The service will operate as follows:

- A. The Contractor shall contract temporary shuttle van service with a vendor who will provide 16-passenger ADA compliant/lift-equipped vans and qualified and experienced operators, as required. The Contractor shall contract temporary shuttle van service with a vendor who will provide 16-passenger ADA compliant/lift-equipped vans and qualified and experienced operators. The shuttle van service vendor shall maintain the required insurances and a current Charter Party permit or Passenger Stage permit issued by the State of California Public Utilities Commission applicable to operate as required, and provide a copy to the Engineer.
- B. The shuttle route and the planned stops shall be along Macalla Rd. and Treasure Island Road, as shown on the plans and as approved by the Engineer. The shuttle will service passengers on YBI and depart from the Treasure Island (TI) Main Gate, proceeding along Macalla Road, with proposed turnaround point noted as the U.S. Coast Guard Station Gate at the end of Macalla Road. A round trip is approximately 2.3 miles long and takes approximately 16 minutes.
- C. The shuttle route and the schedule shall connect and conform to the existing San Francisco Municipal Railway (Muni) Route 108 motor coach service, which operates a bus service on YBI and TI from the Transbay Terminal in downtown San Francisco. Based on the existing Muni Route 108 schedule, it is estimated that two vans will be needed when 15 minute service is provided on Muni Route 108 and one van would be needed at all other times. The Contractor shall coordinate with San Francisco MUNI's Service Planning Department at (415) 934-3999, at 15 working days prior to commencing service.
- D. Any schedule changes in the SF Muni Route 108 Motor Coach Service shall be incorporated in the Temporary Shuttle Van Service provided by the Contractor.
- E. The shuttle shall provide a timed transfer with Muni Route 108 at the TI Main Gate.
- F. The service shall operate 24 hours a day, seven days a week, once Southgate Road is closed to general public traffic simultaneously with the closure of eastbound 80 off-ramp, or at the discretion of the Engineer
- G. The service shall be free to the public/passengers.
- H. Costs for providing temporary shuttle van service will be made in conformance with the provisions in Section 9-1.03, "Force Account Payment," of the Standard Specifications.

### **10-1.15 TEMPORARY BYPASS STRUCTURE**

Attention is directed to "Contractor Design," elsewhere in these special provisions regarding the design, acceptance, and authorization for construction by the Department of the temporary bypass structure.

This work shall consist of constructing the temporary bypass structure (TBS) complete in place, including all required bridge barrier railing, wearing surface, bridge mounted utilities and related utility relocations, deck drainage system, and signs, at the location shown on the plans and in accordance with the Contractor's design plans that are accepted and authorized by the Department for construction.

#### **GENERAL**

The TBS, is shown schematically on the plans with the required design criteria to enable the Contractor to develop the design. The TBS, as shown on the plans, is divided into the following structure segments:

1. West Tie-In,
2. Viaduct, and
3. East Tie-In

Additionally, for the purposes of design submittals, temporary structures designated as Important Construction in "Temporary Supports," elsewhere in these special provisions, shall be considered as bridge segments of the TBS. Submittals for temporary structures designated as Support Structure (Locations A through D) shall be made as one inclusive bridge segment.

Each bridge segment contains the following structure elements:

1. Foundation(s), defined as the structural elements that transfers load to the soil or foundation material. Foundation elements shall consist of components such as driven piles, tie-down anchors, and other like individual structural members or work below a pile cap or spread footing.
2. Substructure(s), defined as vertical structural elements between the foundation and superstructure elements. Substructure elements shall consist of components such as pile caps, abutments, columns, piers, drop bent caps, drilled shafts, cast-in-place piles, and other like individual structural members.
3. Superstructure, defined as the longitudinal and horizontal structural elements, and appurtenances shown on the plans, that are above the substructure. Superstructure elements shall consist of components such as beams, integral bent caps, girders, trusses, and other like individual structural members.

Unless otherwise authorized by the Department, the TBS shall be constructed in conformance with the construction sequence, also defined as steps, as shown on the plans.

The approach slab, where shown on the plans, shall be included in the Contractor's design of the TBS.

The Contractor shall furnish and install expansion joint closures for the existing west tie-in as shown on the plans. Expansion joint closures shall conform the details shown on the plans and as specified in these special provisions. All metal parts shall conform to the provisions in Section 75-1.03, "Miscellaneous Bridge Metal," of the Standard Specifications. Where shown on the plans, asphaltic plug joint components shall conform to the requirements for asphaltic plug joint seal contained in "South Edge Girder Support," elsewhere in these special provisions. Where shown on the plans, joint filler shall conform to the requirements in Section 51-1.12, "Expansion and Fixed Joints and Bearings," of the Standard Specifications. Where shown on the plans, metal parts shall receive a nonskid surface consisting of epoxy mixed with grit. Epoxy shall consist of epoxy conforming to the provisions in either Section 95-2.01, "Binder (Adhesive), Epoxy Resin Base (State Specification 8040-01F-03)," or Section 95-2.09, "Epoxy Sealant for Inductive Loops (State Specification 8040-31D-06)," of the Standard Specifications. Grit shall consist of commercial quality aluminum oxide, silicon carbide, or almandite garnet grit particles, screen size 1.7 m to 600 µm or 1.4 m to 500 µm, applied uniformly at the rate of at least 1.5-kg per square meter of surface area.

In addition to deck drainage on the TBS, the Contractor's design of the TBS shall include provisions for drainage of the existing portions of the west tie-in.



Attention is directed to "Project Information," of these special provisions regarding the materials information handout for foundation and design information. The Contractor's design of the TBS shall include a wearing surface over the Viaduct and East Tie-In. Attention is directed to "Project Information" of these special provisions regarding the project noise requirement as stated in the USCG License No. DTCG-Z71111-03-RP-002L, Amendment NO. 1, Maintenance & Logistics Command Pacific between the United States Coast Guard and The State of California Department of Transportation. A portland cement concrete wearing surface over the Viaduct and East Tie-In will not be allowed. The Contractor shall design and furnish the type and thickness of wearing surface in compliance with the MOA and the design criteria shown on the plans.

Attention is directed to the requirements under the subsection, "Land-Based Excavation Dewatering" in "Non-Storm Water Discharges," elsewhere in these special provisions, regarding additional requirements that apply to pile construction. Where temporary casing is used, pile excavation shall not advance below the tip of the casing.

Attention is directed to the following sections of these special provisions regarding permit restrictions and regulations that may impact TBS design and construction:

- A. Relations with the U.S. Coast Guard
- B. Relations with the Regional Water Quality Control Board
- C. Relations with United States Fish and Game Service
- D. Maintaining Traffic
- E. Sound Control Requirements
- F. Obstructions

Attention is directed to Section 7-1.16, "Contractor's Responsibility for the Work and Materials," of the Standard Specifications. Ordering or fabricating materials prior to receiving construction authorization by the Department, will be at the Contractor's risk.

Prior to proceeding with each segment of TBS construction, the Contractor shall notify the Engineer of such operations and shall not begin such operations until the Engineer, or the Engineer's authorized representative, is at the work site to observe the operation. The presence of the Engineer, or the Engineer's authorized representative, shall not relieve the Contractor of the responsibility to pay for any work performed by the Contractor that does not comply with the design plans authorized by the Department.

The Contractor may proceed with TBS construction provided that the following requirements have been fulfilled:

- A. The Contractor shall not begin construction of components of foundation elements, or work below spread footings prior to the following:
  - 1. The Engineer's acceptance of the preliminary design submittals for the foundation, substructure, and superstructure elements of an entire segment.
- B. The Contractor shall not begin construction of components of substructure elements prior to the following:
  - 1. The Engineer's acceptance and review of the final design submittals for the foundation elements of an entire segment.
  - 2. The Engineer's acceptance the final design submittals for the substructure elements of an entire segment.
  - 3. The Engineer's acceptance of the preliminary design submittals for the superstructure elements of an entire segment.
- C. The Contractor shall not begin construction of components of superstructure elements prior to the following:
  - 1. The Engineer's acceptance and review of the final design submittals for the substructure elements of an entire segment.
  - 2. The Engineer's acceptance the final design submittals for the superstructure elements of an entire segment.

Public traffic will not be permitted on the TBS until superstructure final design submittals for all superstructure elements have been authorized for by the Department for construction, and all construction submittals for the TBS have been received by the Engineer.

## **MEASUREMENT AND PAYMENT**

Temporary Bypass Structure, East Tie-In will be paid by the lump sum to the limits shown on the contract plans and the Contractor's design plans that are authorized by the Department for construction.

Temporary Bypass Structure, Viaduct will be paid by the lump sum to the limits shown on the contract plans and the Contractor's design plans that are authorized by the Department for construction.

Temporary Bypass Structure, West Tie-in will be paid by the lump sum to the limits shown on the contract plans and the Contractor's design plans that are authorized by the Department for construction.

The contract lump sum price paid for each segment of the temporary bypass structure listed in the Engineer's Estimate shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in constructing the temporary bypass structure, complete in place, as shown on the contract plans and the Contractor's design plans that are authorized by the Department for construction, and as specified in the standard specifications, the authorized supplemental technical special provisions, and these special provisions.

Full compensation for expansion joint closures shall be considered as included in the contract lump sum price paid for Temporary Bypass Structure, West Tie-in, and no separate payment will be made therefor.

## **RECONSTRUCT SOUTHGATE ROAD**

The Contractor shall design and reconstruct Southgate Road for a design speed of 25 km/h, a low speed facility, which has an approximate length of 100 meters, affected by the construction of the abutment and approach foundation of the Route 80 Temporary Bypass Structure, by the completion of the 04-0120R4 Contract.

The work shall consist of designing and reconstructing a 100 meters in length of the Southgate Road roadway, including the following work:

- 1- Cold Planning of Asphalt Concrete pavement in conformance with "Cold Plan Asphalt Concrete Pavement" of these special provisions,
- 2- Asphalt Concrete surfacing with Asphalt Concrete (Type A) in conformance with "Asphalt Concrete" of these Special Provisions. The estimate quantity of Asphalt Concrete (Type A) is 100 tonne.
- 3- Roadway Excavation in conformance with "Earthwork" of these special provisions. The estimate quantity of roadway excavation is 140 m3.
- 4- Reconstruction of the Metal Beam Guard Railing in conformance with Section 83-1.02B, "Metal Beam Guard Railing," of the Standard Specifications;
- 5- Reconstruction of the drainage system facilities and AC dike in conformance with "Drainage Facilities," of these special provisions;
- 6- Installation two construction area signs, W15 (ROAD NARROWS)

The reconstructed Southgate Road roadway shall conform to the adjacent limits as directed by the Engineer, and the following requirements:

- 1- A minimum roadway width of 5.0-meters.
- 2- A minimum vertical clearance of 3.7-meter between the pavement and the TBS and eastbound on-ramp.
- 3- A minimum structural section of 190-mm AC (Type A).
- 4- A finished profile grade of not to exceed 5%.

The Contractor shall submit to the Engineer working drawings, for the reconstruction of Southgate Road.

Working drawings shall conform to the requirements in "Working Drawings," of these special provisions. The working drawings shall include, but not be limited to the following plans sheets: Typical Section, Layout, Construction Details and Pavement Elevation or Profiles and Roadway Summary of Quantities, and drainage layout, drainage profile, drainage details and drainage quantities.

The Contractor shall allow three weeks after complete drawings are submitted, for the review and approval of the reconstruction of Southgate Road.

Should the Engineer fail to complete the review and approval within the time allowance and if, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of the delay in working drawing review and approval for the drainage facilities, the delay will be considered a right of way delay in conformance with the provisions in Section 8-1.09, "Right of Way Delays" of the Standard Specifications.

## **PAYMENT**

The contract lump sum price paid for reconstruct Southgate Road shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in designing and constructing the Southgate Road, complete in place, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

### 10-1.295 BARRIER TRUCK

This work shall consist of furnishing, placing, operating, maintaining, and removing barrier trucks as specified in these special provisions and as directed by the Engineer.

The Contractor shall provide a barrier truck to protect the equipment and personnel, operating the equipment, in the closed lane.

Barrier trucks weight shall be a minimum of 9000 kilograms and shall be equipped with a truck-mounted crash cushion (TMCC).

Truck-mounted crash cushions (TMCC) shall meet the requirements as specified in these special provisions.

The Contractor shall park one barrier truck 50 meters in advance of the equipment being operated in the closed lane unless otherwise directed by the Engineer. The barrier truck shall be equipped with a manual transmission, the transmission set in second gear, the emergency brakes engaged, and the ignition off. The barrier truck shall be unoccupied and positioned so that it will shield the equipment and personnel and will intercept errant vehicles. The barrier truck shall be parked on clean pavement with the front of the truck pointed away from traffic to prevent secondary collisions if the barrier truck is hit and pushed ahead. The front wheels shall be turned away from the lanes open to the traffic.

Barrier trucks, when no longer required for the work, as determined by the Engineer, shall become the property of the Contractor.

Full compensation for furnishing, placing, operating, maintaining, and removing barrier trucks shall be considered as included in the contract lump sum price paid for traffic control system and no additional compensation will be allowed therefor.

Truck-mounted crash cushions (TMCC) for use in moving lane closures shall be any of the following approved models, or equal:

(1) Hexofoam TMA Series 3000 and Alpha 1000 TMA Series 1000 and Alpha 2001		
Manufacturer:	Distributor (Northern):	Distributor (Southern):
Energy Absorption Systems, Inc	Traffic Control Service, Inc	Traffic Control Service, Inc
One East Wacker Drive	8585 Thys Court	1881 Betnor Lane
Chicago, IL 60601-2076	Sacramento, CA 95828	Anaheim, CA 92805
Telephone (312) 467-6750	Telephone (800) 884-8274	Telephone (800) 222-8274
	Fax (916) 387-9734	

(2) Cal T-001 Model 2 or Model 3	
Manufacturer:	Distributor:
Hexcel Corporation	Hexcel Corporation
11711 Dublin Blvd.	11711 Dublin Blvd.
P.O. Box 2312	P.O. Box 2312
Dublin, CA 94568	Dublin, CA 94568
Telephone (510) 828-4200	Telephone (510) 828-4200

(3) Renco Rengard Model Nos. CAM 8-815 and RAM 8-815	
Manufacturer:	Distributor:
Renco Inc.	Renco Inc.
1582 Pflugerville Loop Road	1582 Pflugerville Loop Road
P.O. Box 730	P.O. Box 730
Pflugerville, TX 78660-0730	Pflugerville, TX 78660-0730
Telephone (800) 654-8182	Telephone (800) 654-8182

Each TMCC shall be individually identified with the manufacturer's name, address, TMCC model number, and a specific serial number. The names and numbers shall each be a minimum 13mm high, and located on the left (street) side at the lower front cover. The TMCC shall have a message next to the name and model number in 13mm high letters which states, "The bottom of this TMCC shall be \_\_\_\_\_ mm  $\pm$  \_\_\_\_\_ mm above the ground at all points for proper impact performance." Any TMCC which is damaged or appears to be in poor condition shall not be used unless recertified by the manufacturer. The Engineer shall be the sole judge as to whether used TMCCs supplied under this contract need recertification. Each unit shall be certified by the manufacturer to meet the requirements for TMCCs in accordance with the standards established by the Transportation Laboratory Structures Research Section.

Approvals for new TMCC designs proposed as equal to the above approved models shall be in accordance with the procedures (Including crash testing) established by the Transportation laboratory Structures Research Section. For information regarding submittal of new designs for evaluation contact:

Transportation Laboratory  
Structures Research Section  
P.O. Box 19128  
5900 Folsom Boulevard  
Sacramento, CA 95819

New TMCCs proposed as equal to approved TMCCs or approved TMCCs determined by the Engineer to need recertification shall not be used until approved or recertified by the Transportation Laboratory Structures Research Section.

# ENGINEER'S ESTIMATE

04-0120R4

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
61	566011	ROADSIDE SIGN - ONE POST	EA	28		
62	BLANK					
63 (S)	800391	CHAIN LINK FENCE (TYPE CL-1.8)	M	21		
64 (S)	800394	CHAIN LINK FENCE (TYPE CL-1.8, EXTENSION ARM)	M	70		
65 (S)	802592	2.4 M CHAIN LINK GATE (TYPE CL-1.8)	EA	4		
66	820107	DELINEATOR (CLASS 1)	EA	11		
67	820134	OBJECT MARKER (TYPE P)	EA	3		
68	833080	CONCRETE BARRIER (TYPE K)	M	560		
69 (S)	839603	CRASH CUSHION (ADIEM)	EA	2		
70 (S)	840515	THERMOPLASTIC PAVEMENT MARKING	M2	29		
71 (S)	840561	100 MM THERMOPLASTIC TRAFFIC STRIPE	M	3230		
72 (S)	840563	200 MM THERMOPLASTIC TRAFFIC STRIPE	M	380		
73 (S)	840564	200 MM THERMOPLASTIC TRAFFIC STRIPE (BROKEN 3.66 M - 0.92 M)	M	1960		
74 (S)	031088	100 MM THERMOPLASTIC TRAFFIC STRIPE (BROKEN 10.48 M - 4.26 M)	M	3610		
75 (S)	850101	PAVEMENT MARKER (NON-REFLECTIVE)	EA	2090		
76 (S)	850102	PAVEMENT MARKER (REFLECTIVE)	EA	880		
77	BLANK					
78 (S)	031090	ELECTRICAL WORK (STAGE 2)	LS	LUMP SUM	LUMP SUM	
79 (S)	031091	300 MM WATER MAIN	M	73		
80 (S)	031092	100 MM WATER LINE	M	74		

**ENGINEER'S ESTIMATE****04-0120R4**

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
81 (S)	031093	12 NPS WATER MAIN (TEMPORARY BYPASS STRUCTURE)	M	410		
82 (S)	031094	4 NPS WATER LINE (TEMPORARY BYPASS STRUCTURE)	M	410		
83	BLANK					
84	031695	SEWER VIDEO SURVEY	LS	LUMP SUM	LUMP SUM	
85	BLANK					
86	153151	COLD PLANE ASPHALT CONCRETE PAVEMENT (25 MM MAXIMUM	M2	1153		
87	390102	ASPHALT CONCRETE (TYPE A)	TONN	2200		
88	BLANK					
89	120140	BARRICADE (LEFT IN PLACE)	EA	4		
90	032009	SOUTH EDGE GIRDER SUPPORT	LS	LUMP SUM	LUMP SUM	
91	032010	DRAINAGE FACILITIES	LS	LUMP SUM	LUMP SUM	
92	BLANK					
93	032071	RECONSTRUCT SOUTHGATE ROAD	LS	LUMP SUM	LUMP SUM	
94	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

**TOTAL BID (A):** \_\_\_\_\_**TOTAL BID (B):****\$ 100,000.00**      x      \_\_\_\_\_**(Cost Per Day) (Enter Working Days Bid)****(Not To Exceed 730 Days)****TOTAL BASIS FOR COMPARISON  
OF BIDS:****(A+B):**      =      \_\_\_\_\_